

## **REMARKS**

### **Supplemental Information Disclosure Statement**

Applicant has enclosed herewith a supplemental information disclosure statement that references several documents brought to Applicant attention in a foreign prosecution associated with the above-captioned matter. Specifically, the indicated references are cited in on the cover and in the search report associated with EP 1,454,694B1, which is an issued European patent having priority common with this matter. Additionally, German publication DE 100 60 283 corresponds to USP 6,692,198 which was previously cited by the Examiner.

### **Response to Office Action**

In the Office Action mailed June 27, 2006, the Examiner objected to the specification for several informalities. Applicant has amended two paragraphs of the specification to address the informalities indicated by the Examiner. The Examiner also objected to claims 13 and 15 as including exemplary language. Applicant has amended claims 13 and 15 to clarify that which called for therein. Applicant appreciates the Examiner's thorough review of the pending application.

The Examiner next rejected claims 1, 17, 19 and 20 under 35 U.S.C. §112, second paragraph. Applicant has amended each of these claims to clarify the same. As amended, claim 1 calls for in part, a screw part operationally engaged with the adjusting element for securing a position of the adjusting element relative to the cutting insert. Applicant has also included herewith new claim 22 which clarifies the compressive association of the screw part relative to the adjusting element. That is, as stated by the Examiner, the clause "chain of pressure force" is interpreted to mean "the screw applies a restoring force to the adjusting element." New claim 22 clarifies that the "chain of pressure force" is a compressive force generated by the association of the adjusting element and the screw element. That is, the association of the individual parts generates a compression force between the adjusting element and a screw element as compared to a tension force. Applicant has also amended claim 1 to resolve any ambiguity with respect to the "narrow point" as calling for a constriction in the through opening.

Claim 7 has been amended in accordance with the Examiner's interpretation thereof to call for, in part, the cutting insert being indexable. Claim 19 has been amended to further clarify that which is called for therein. As amended, claim 19 further defines that the tool has a layer that is made up of a plurality of individual layers that are homogeneous in themselves and formed from at least one of a balanced mixture having 38%-50% Ti, 48%-60% Al, 0%-4% Y, N, and CrN. Applicant has amended claim 20 to also clarify the same. As amended, claim 20 further defines the tool defined in claim 1 as characterized in that the cutting insert is formed by a DIN/ISO insert that is indexable. One of ordinary skill in the art of cutting tools will readily appreciate that the DIN/ISO nomenclature stands for The Deutsches Institut für Normung e.V. (the German Institute for Standardization) and is Germany's ISO member body. That is, claim 20 further defines that the tool insert is a standardized indexable insert. Accordingly, Applicant believes that each of the Examiner's objections to the claims has been addressed. No new matter has been added.

The Examiner next rejected claims 12, 14, 17, and 19 as being indefinite as including broad and narrow range limitations. Applicant has amended each of these claims to address the Examiner's objections. Applicant believes claims 1-21 are in accordance with 35 U.S.C. §112. As such, Applicant believes that each of the 35 U.S.C. §112 rejections has been favorably resolved.

The Examiner rejected claim 1 under 35 U.S.C. §102(b) as being anticipated by *Kress* (USP 6,692,198) asserting that *Kress* "teaches the adjusting screw arrangement comprising a threaded sleeve (29) that is held with play in a smooth through opening having a narrow point (with width WL: see below) and comprises a screw part (31) standing in functional engagement therewith such that the clamping screw (31) applies a restoring force to the adjusting element ('198, Figure 1 and Col. 8, lines 13-15)." Applicant respectfully disagrees.

Claim 1 calls for, in part, an adjusting screw arrangement comprising a threaded sleeve that is held with play in a smooth through opening within a blade bearer and a screw part standing in functional arrangement with the threaded sleeve. Simply, no such construction is

disclosed in *Kress*. *Kress* discloses a tool for fine machining of work pieces generally similar to that disclosed in the background of the present application. That is, *Kress* discloses a cutter adjustment system wherein the adjustment means is secured to the tool with a threaded fastener or setscrew. Referring to Fig. 1, *Kress* states that “the setscrew 31 is accommodated in a hole in the base body 4.” Although applicant appreciates the Examiner’s revision and presentation of the figure of *Kress* at page 8 of the Office Action, the Examiner’s interpretation of the disclosure therein is simply incorrect. Furthermore, Applicant’s appreciation of the contribution of the system of *Kress* to the art is discussed at lines 24-29 of page 1 and lines 1-11 of page 2 of the above-captioned application. That is, upon the Examiner’s review of these particular portions of the above-captioned application, Applicant believes the distinctions between the presently claimed invention and the system of *Kress* will be readily apparent.

*Kress* states that “when the setscrew 31 is turned in the one direction of rotation, the adjusting element 27 is displaced and, on account of the wedge-shaped contact between the adjusting element 27 and the cutter tip 11, the cutter tip 11 is displaced radially outward, during which the clamping screw 19 holding the cutter tip 11 is elastically deformed.” Col. 5, ll. 29-34. *Kress* further states that “during the setting, if the setscrew 31 is turned in the other rotation direction, the adjusting element 27 is displaced in the other direction.” Col. 5, ll. 35-38. Setscrew 31 is clearly threadably engaged with tool holding body 4 and adjusting element 27. The Examiner’s conclusion that *Kress* discloses a threaded sleeve (29) is inaccurate. *Kress* states that “FIGS. 5b and 5d show that the adjusting surface 29 is inclined relative to the horizontal center plane 47, indicated by a line, of the adjusting element 27.” C. 3, ll. 60-63. That is, adjusting surface 29 is not a threaded sleeve as asserted by the Examiner, but is a tapered surface constructed to engage the cutting tool as disclosed by *Kress*. As shown in Fig. 1 of *Kress*, adjusting element 27 is connected to body 4 of tool 1 by setscrew 31 being threadably engaged with body 4. Rotation of setscrew 31 translates adjusting element 27 relative to cutter tip 11 to effectuate translation of the cutter tip relative to body 4. Simply, *Kress* fails to disclose, teach, or suggest a threaded sleeve that is held with play in a smooth through opening of a cutter body as

called for in claim 1.

The combination of *Chang* (USP 6,155,753) adds nothing to the disclosure of *Kress* to overcome the shortcomings mentioned above. Specifically, as best shown in Figs. 1, 3, and 8 of *Chang*, the fine adjusting mechanism of the cutting tool disclosed therein clearly includes a setscrew that is constructed to threadably engage the body of the tool holder. That is, the construction of the mechanism of *Chang* is much more similar to the construction of the holder of *Kress* than it is similar to the presently claimed invention. Accordingly, *Chang* also fails to disclose a threaded sleeve that is held with play in a smooth through opening of a blade bearer as called for in claim 1. *Chang* and *Kress* both disclose an adjustment mechanism that is secured to the body of the tool by a threaded recess formed in the body of the tool itself. That is, assemblies of *Kress* and *Chang* are variants of the very construction addressed in the background of the present application. In the Background of the present application it is disclosed that cutting adjustment systems that threadingly engage the tool body are expensive and time consuming to manufacture and assemble and difficult to operate to ensure precise positioning of the cutting insert. Accordingly, neither *Kress* nor *Chang* disclose, teach, or suggest that which is called for in claim 1. As such, Applicant believes claim 1, and the claims that depend therefrom, are patentably distinct thereover.

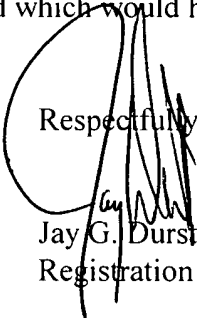
The Examiner rejected claims 12, 13, 15-19 and 21 under 35 U.S.C. §103(a) as being unpatentable over *Kress* in view of *Schulz et al.* (USP 5,549,975). Like *Chang*, *Schulz et al.* also does not disclose, teach, or suggest that which is lacking in *Kress*. Accordingly, as claims 12, 13, 15-19 and 21 depend from claim 1, Applicant believes these claims are also in condition for allowance at least pursuant to the chain of dependency.

The Examiner also rejected claim 14 under 35 U.S.C. §103(a) as being unpatentable over *Kress* stating that “*Kress* discloses the claimed invention (i.e., threaded sleeve, to be engaged by the threading by the screw 31), except for the winding of the threaded sleeve having a size in the range of M.08-M16 or M1.2-M16 [sic].” As argued above with respect to claim 1, *Kress* simply does not disclose, teach, or suggest a threaded sleeve as called for in claim 1. *Kress* discloses a

cutting insert adjustment system substantially similar to that disclosed by *Chang*. That is, *Kress* discloses a "setscrew that threadably engages a body of the tool holder." A set screw is not a threaded sleeve. Accordingly, at least for the reasons set forth above, Applicant believes claim 14 is also patentably distinct over *Kress*.

Therefore, in light of the forgoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests an indication of the same for claims 1-21. The Office is hereby authorized to charge Deposit Account 50-1170 the amount of \$300.00 for a one-month extension fee in the amount of \$120.00 and the \$180.00 fee associated with submission and consideration of the enclosed Supplemental IDS filed under 37 C.F.R. §1.97(c). The Director is further authorized to charge any additional required fees associated with this or any other communication, or credit any overpayment, to Deposit Account No. 50-1170. Applicant appreciates the Examiner's consideration of these amendments and remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved which would hinder the passage of the above captioned matter to issuance.

Respectfully submitted,

  
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